

REMARKS

Claims 1-20 are pending in this application. By this Amendment, claims 1, 9 and 13 have been amended. These amendments are being made to facilitate early allowance of the presently claimed subject matter. Applicants reserve the right to pursue the full scope of the subject matter of the original claims in a subsequent patent application that claims priority to the instant application. Reconsideration in view of the above amendments and following remarks is respectfully requested.

In the Office Action, claims 3-4, 12, 16 and 18 are objected to as being dependent upon rejected base claims, but would be allowable if rewritten in an independent form including all of the limitations of the base claims and any intervening claims. Applicants gratefully appreciate this indication. Applicants, however, submit that such a rewriting is not necessary because those dependent claims are allowable both for their allowable base claims, and for their own allowable additional features.

In the Office Action, claims 1-2, 5-11, 13-15, 17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster (US Patent No. 6,387,804). Applicants respectfully submit that the claimed invention is allowable for the reasons stated below.

With respect to claims 1, 9 and 13, for example, Applicants submit that Foster does not disclose or suggest each and every claimed feature. For example, Foster does not disclose or suggest, *inter alia*, "exposing only the first gate structure to an ozonated water bath [,]" as recited in claim 1 and claimed similarly in claims 9 and 13. That is, the claimed invention does not expose the second gate structure having a p-type dopant therein to the ozonated water bath. Such an arrangement ensures that the claimed invention can salicidize the first and second gate

structures together but silicide is formed only over the second gate structure. (Claim 1). Foster discloses that “[a] sidewall spacer surface 20 with dangling silicon bonds 21 is contacted with a solution of ozone and water[.]” (Col. 4, lines 23-25). Foster also discloses “immersing the intermediate product 10 in a vessel 34 containing the ozone/water solution 32[.]” (Col. 4, lines 63-64). Foster, however, does not disclose selectively exposing a first gate structure to ozonated water bath without doing the same to a second gate structure. Actually, as Foster is concerned with preventing a shorting between a transistor gate electrode and associated source/drain regions due to metal silicide formation on the sidewall spacers (Abstract), Foster will expose all spacer surfaces of all gate structures to the ozone water solution. In view of the foregoing, Foster does not disclose or suggest each and every claimed feature.

With further respect to claims 1, 9 and 13, the Office admits that Foster does not disclose or suggest “providing a first [gate] structure having an n-type dopant therein and a second [gate] structure having a p-type dopant[.]” The Office, however, asserts that “[i]t would be obvious that Foster’s process could be used to form CMOS devices, and since it follows the same path the same result would occur.” (Office Action at page 4). (Inner citation omitted). Applicants respectfully traverse this assertion for the reasons stated below.

The Federal Circuit held that in holding an invention obvious, there must be some suggestion, motivation or teaching in the prior art reference that lead a person of ordinary skill in the art to modify the prior reference. *Karsten Mfg. Corp. v. Cleveland Gulf Co.*, 242 F.3d 1376, 1385 (Fed. Cir. 2001).

First, the teaching of Foster does not lead a person of ordinary skill in the art to use the Foster process as claimed. In particular, Foster does not realize that an artificial layer generated

by exposing the first gate structure to an ozonated water bath could prevent silicide formation thereon. Rather, Foster believes that "the oxide layer formed on the surfaces of the gate electrode and source/drain regions does not prevent subsequent silicide formation thereon because these regions are predominantly elemental silicon available for chemical reaction with the metal layer." (Col. 5, lines 4-8). (Emphasis added). As a consequence, a person of ordinary skill in the art would not use the Foster teaching to selectively silicidize a CMOS because, based on the Foster teaching, silicide formation will not be prevented on the first gate structure. It is the current invention that creates the method to expose the first gate structure to an ozonated water bath to prevent silicide from forming thereon.

Second, Foster does not disclose any suggestion or motivation to modify. Foster is concerned with preventing a shorting between a transistor gate electrode and associated source/drain regions due to metal silicide formation on the sidewall spacers. (Abstract). Foster is not concerned with selective salicidation of a CMOS device. Therefore, Foster does not show any suggestion or motivation to use the Foster process as claimed. The mere fact that the Foster process could be used to selectively form silicide (as the Office asserts) is not enough to establish obviousness. Applicants submit that the Office's assertion that a suggestion or motivation exists to use the Foster process as claimed is based on the hindsight teaching of the currently claimed invention, which is improper.

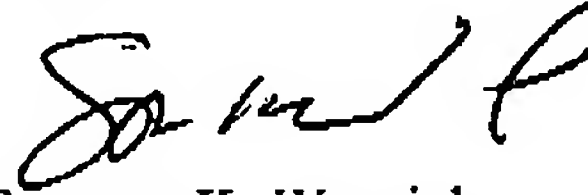
In view of the foregoing, Applicants submit that the Office fails to establish a *prima facie* case of obviousness. Accordingly, Applicants respectfully request withdrawal of the rejections.

The dependent claims are believed allowable for the same reasons stated above, as well as for their own additional features.

CONCLUSIONS

Applicants respectfully submit that the application is in condition for allowance. Should the Examiner believe that anything further is necessary to place the application in better condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



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9/23/05

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